

ADAPTIVE IMPEDANCE OUTPUT DRIVER CIRCUIT

ABSTRACT

Disclosed is an output driver having an output port for outputting a data signal, a level shifter for driving a current to the output port in response to a current control input, an adjustable impedance controller for generating an impedance adjustment signal; an output impedance compensator for adjusting the impedance of the level shifter in accordance with the impedance adjustment signal and in accordance with a reference voltage, and a tracking circuit, including a process and temperature monitor responsive to manufacturing process and temperature variations of the output driver, a frequency monitor responsive to the frequency of an input clock signal, and a voltage supply monitor responsive to an internal power supply voltage. The process and temperature monitor, frequency monitor and voltage supply monitor are interconnected so as to generate the reference voltage.